B1 cont. nanodevice and said microdevice with an organo hydroxyl.

REMARKS

Claims 1-9 and 11-19 are pending in this application. By this amendment, Claims 1, 9, 14, 15, 16 and 17 are amended.

Applicants respectfully traverse the Office Action provisional rejection of claims 1-19 under the doctrine of obvious-type double patenting as being allegedly unpatentable over claims 1-17 of copending Application No. 09727749 and over claims 1-14 of copending Application No. 09/727,716. The Office Action asserts that "[A]lthough not all of the conflicting claims are identical, there is duplication and the remaining claims are not patentably distinct from each other." See the Office Action, page 3, paragraph 4. Applicants respectfully submit the claims of this application do not duplicate the invention disclosed in copending Application No. 09/727749 and the invention disclosed in copending Application No. 09/727,716 because said claims in each Application are patentable in view of each other. Specifically, the claims of this application claim inserting a micro or nanodevice into a body fluid. In contrast, the claims of copending Application No. 09/727749 claim inserting a micro or nanodevice and detecting a bodily condition. The claims of copending Application No. 09/727,716 claim a micro and nanodevice attached to or inserted within a biological member and a method for attaching or inserting said devices to or within said biological member. Applicants submit that the method for inserting a nano and microdevice into a bodily fluid stream of the present invention, the method of detecting bodily condition using nano and microdevices of Application No. 09/727749 and the method for inserting or attaching said devices to or within a biological member of Application No.

biological member of Application No. 09/727,716 are entirely different methods. Applicants respectfully request that the provisional double patenting rejection of claims 1-19 be withdrawn.

The Examiner rejected Claims 9, 14 and 18 under 35 U.S.C. 112, second paragraph, because "the step of selecting" lacks antecedent basis. Accordingly, Applicants have amended Claims 9, 14 and 18.

The Examiner rejected Claims 1, 2, 4, 6, 7 and 15 under 35 U.S.C. 102(e) as being allegedly anticipated by Vo-Dinh U.S. Patent No. 6,219,137 or, in the alternative, under 35 U.S.C. 103(a) as allegedly obvious over Vo-Dinh.

The Examiner rejected Claims 1, 2, 6, 7 and 15 under 35 U.S.C. 102(b) as being allegedly anticipated by Merkle.

The Examiner rejected Claims 3, 5 and 8 under 35 U.S.C. 103(a) as being allegedly unpatentable over Vo-Dinh in View of Hadlaczky *et al.* U.S. Patent No. 6,077,697.

The Examiner rejected Claims 9, 11 and 14 under 35 U.S.C. 103(a) as being allegedly unpatentable over Merkle in view of Peeters U.S. Patent No. 6,123,819 or alternatively, Vo-Dinh in view of Peeters.

The Examiner rejected Claims 12-14 under 35 U.S.C. 103(a) as being allegedly unpatentable over Merkle in view of Ostensen *et al.* U.S. Patent No. 6,375,931 or, alternatively, Vo-Dinh in view of Ostensen *et al.*

The Examiner rejected Claims 16-18 under 35 U.S.C. 103(a) as being allegedly unpatentable over Merkle or, alternatively, Vo-Dinh as applied to Claim 15 above further in view of Schechter *et al.* U.S. Patent No. 4,120,649.

The Examiner rejected Claims 17-19 under 35 U.S.C. 103(a) as being allegedly

unpatentable over Merkle or, alternatively, Vo-Dinh as applied to Claim 15 above further in view of Dustin *et al.* U.S. Patent No. 5,071,964.

The Examiner rejected Claims 17-19 under 35 U.S.C. 103(a) as being allegedly unpatentable over Merkle or, alternatively, Vo-Dinh as applied to Claim 15 above further in view of Li *et al.* U.S. Patent No. 6,090,408.

Applicants respectfully traverse the 35 U.S.C. 102(e), (b) and 103(a) rejections with the following arguments.

35 U.S.C. 102(e) and (b)

The Examiner rejected Claims 1, 2, 4, 6, 7 and 15 under 35 U.S.C. 102(e) as being allegedly anticipated by Vo-Dinh U.S. Patent No. 6,219,137 or, in the alternative, under 35 U.S.C. 103(a) as allegedly obvious over Vo-Dinh. Applicants respectfully traverse the Examiner's rejection because Vo-Dinh fails to teach or suggest each and every feature of Applicants' independent Claims 1 and 15. Applicants submit that the method Claims 1, and 15 include "providing at least one of a microdevice and a nanodevice, **having at least one circuit feature thereon** ..." (emphasis added). In contrast, Vo-Dinh U.S. Patent No. 6,219,137 teaches "...the nanoprobe can have one of several embodiments ...". See Vo-Dinh, column 3, lines 23-67 and column 4, lines 1-49. No where does Vo-Dinh teach or suggest *inter alia* the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added). Applicants' specification supports the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added). Specifically, Applicants' specification discloses "Referring now to Figure 2, the nanodevice or microdevice of the present invention incorporates

at least one circuit feature thereon, generally 22." See Applicants' specification, page 4, 3rd paragraph.

In light of the foregoing discussion, Applicants respectfully submit that Claims 1, 2, 4, 6, 7 and 15 are in condition for allowance under 35 U.S.C. 102(e) in view of Vo-Dinh because Vo-Dinh does not teach or suggest *inter alia* the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added).

The Examiner rejected Claims 1, 2, 6, 7 and 15 under 35 U.S.C. 102(b) as being allegedly anticipated by Merkle. Applicants respectfully traverse the Examiner's rejection of Claims 1, 2, 6, 7 and 15 under 35 U.S.C. 102(b) using the same reasoning as Applicants used to overcome the Examiner's rejection of Claims 1, 2, 6, 7 and 15 under 35 U.S.C. 102(e) *supra*. Merkle teaches "a device having a **computer**, circulating freely throughout the body " (emphasis added). See Merkle, page 280, section 5, second paragraph. No where does Merkle teach *inter alia* the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added).

In light of the foregoing discussion, Applicants respectfully submit that Claims 1, 2, 4, 6, 7 and 15 are in condition for allowance under 35 U.S.C. 102(b) in view of Merkle because Merkle does not teach *inter alia* the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added).

35 U.S.C. 103(a)

The Examiner rejected Claims 3, 5 and 8 under 35 U.S.C. 103(a) as being allegedly unpatentable over Vo-Dinh in view of Hadlaczky *et al.* U.S. Patent No. 6,077,697. Applicants

respectfully traverse the Examiner's rejection of Claims 3, 5 and 8 under 35 U.S.C. 103(a) because Vo-Dinh in view of Hadlaczky *et al.* U.S. Patent No. 6,077,697 do not teach or suggest *inter alia* the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added). Hadlaczky *et al.* disclose "[M]ethods for preparing cell lines that contain artificial chromosomes, ..." See Hadlaczky *et al.*, Abstract.

In light of the foregoing discussion, Applicants respectfully submit that Claims 3, 5 and 8 are in condition for allowance under 35 U.S.C. 103(a) over Vo-Dinh in view of Hadlaczky *et al.* because Vo-Dinh in view of Hadlaczky *et al.* do not teach or suggest *inter alia* the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added).

The Examiner rejected Claims 9, 11 and 14 under 35 U.S.C. 103(a) as being allegedly unpatentable over Merkle in view of Peeters U.S. Patent No. 6,123,819 or alternatively, Vo-Dinh in view of Peeters. Applicants respectfully traverse the Examiner's rejection of Claims 9, 11 and 14 because Merkle and Peeters or alternatively, Vo-Dinh and Peeters are improperly combined because there is no motivation for one skilled in the art to look to Peeters to modify Merkle or, alternatively, Vo-Dinh. Applicants submit that Merkle and Vo-Dinh disclose *inter alia* in-vivo devices. See Merkle, page 280, section 5, second paragraph, stating "a device having a **computer**, circulating freely throughout the body " (emphasis added). See also Vo-Dinh, column 2, lines 37-40, stating "[T]he nanometer size of these probes allows them to be delivered inside organisms." In contrast, no where does Peeters teach an in-vivo device. Therefore, one skilled in the art would not be motivated to look to Peeters to modify either Merkle or Vo-Dinh because Peeters does not teach an in-vivo device.

In light of the foregoing discussion, Applicants respectfully contend that Claims 9, 11 and

14 are in condition for allowance under 35 U.S.C. 103(a) because the Examiner relied on an improper combination of Merkle or Vo-Dinh in view of Peeters to modify Merkle or Vo-Dinh.

Applicants respectfully traverse the Examiner's remaining rejections under 35 U.S.C. 103(a) because the prior art cited by the Examiner supporting these rejections does not teach or suggest *inter alia* the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added).

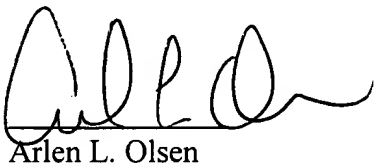
In light of the foregoing, Applicants respectfully contend that independent Claim 1 and Claims 2-9 and Claims 11-14 depending therefrom and independent Claim15 and Claims 16-19 depending therefrom are in condition for allowance under 35 U.S.C 102(e), (b) and 103(a) because none of the prior art cited by the Examiner teaches or suggests *inter alia* the nanodevice "**having at least one circuit feature thereon** ..." as in Claims 1 and 15 (emphasis added).

CONCLUSION

In summary, based on the preceding arguments, Applicants respectfully submit that all independent claims and dependent claims meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invite the Examiner to contact Applicant's representative at the telephone number listed below.

Respectfully submitted for

Applicants: Julian Van Erlach *et al.*



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AMENDED MATERIAL

In the Claims:

1. (AMENDED) A method comprising:

providing at least one of a microdevice and a nanodevice, having at least one circuit feature thereon; and

inserting at least one of said microdevice and said nanodevice into a fluid stream within a body.

9. (SECOND AMENDED) The method of claim 1, further comprising [the] a step of selecting a substrate for at least one of said nanodevice and said microdevice from the group consisting of Gallium Arsenide, silicon, and silicon oxides.

14. (SECOND AMENDED) The method of claim 1, further comprising [the] a step of selecting a material for at least one of said nanodevice and said microdevice from the group consisting of phosphorus, arsenic, sulfur, germanium and organic free radicals.

15. (AMENDED) A method comprising:

providing at least one of a nanodevice and a microdevice, having at least one circuit feature thereon; and

inserting at least one of said nanodevice and said microdevice in a [fluid] blood stream within a body[, wherein at least one of said nanodevice and said microdevice is extracellular].

16. (SECOND AMENDED) The method of claim 15, further comprising [the] a step of chemically modifying at least one of said nanodevice and said microdevice to prolong vascular retention, prevent immunologic detection, or prevent unwanted endocytosis by cells.

17. (AMENDED) The method of claim 15, further comprising [the] a step of chemically modifying the at least one of said nanodevice and said microdevice with an organo hydroxyl.